

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for presorting a plurality of rules for filtering a packet in network, the method comprising ~~the steps of~~:

- (a) selecting a characteristic for sorting the plurality of rules, said characteristic having a plurality of possible values;
- (b) associating each rule with at least one value for said characteristic;
- (c) receiving the packet;
- (d) at least partially analyzing information in the packet to obtain said value for said characteristic;
- (e) selecting at least one of the plurality of rules according to said value obtained by analyzing information in the received packet to form at least one selected rule; and
- (f) applying said selected rule to the packet, such that the packet is permitted to enter the network or alternatively is dropped.

2. (currently amended): The method of claim 1, wherein the plurality of rules are presorted according to each value for said characteristic.

3. (currently amended): The method of claim ~~2~~ 1, wherein said characteristic is at least one of a source address of the packet and a destination address of the packet.

4. (currently amended): The method of claim ~~2~~ 3, wherein said characteristic is a combination of said source address of the packet and said destination address of the packet.

5. (currently amended): The method of claim 3, wherein a user is associated with each value of said characteristic, such that ~~step (b)~~ said associating each rule with at least one value for said characteristic further comprises ~~the steps of:~~

- (i) assigning at least one privilege to said user; and
- (ii) determining whether to associate each rule with said value of said characteristic according to said at least one privilege.

6. (currently amended): The method of claim 5, wherein ~~step (i)~~ said assigning at least one privilege to said user further comprises ~~the step of~~ determining a user profile of associated rules according to said at least one privilege.

7. (original): The method of claim 6, wherein said user profile is further associated with a group profile, such that a plurality of values for said characteristic is associated with said associated rules of said group profile.

8. (New) An apparatus for presorting a plurality of rules for filtering a packet in a network, wherein a characteristic for sorting the plurality of rules is selected, said characteristic has a plurality of possible values, and each rule is associated with at least one value for said characteristic, the apparatus comprising:

- a software module for performing the operations of:
 - at least partially analyzing information in a packet to obtain said value for said characteristic;

selecting at least one of the plurality of rules according to said value obtained by analyzing information in the packet to form at least one selected rule; and

applying said selected rule to the packet, such that the packet is permitted to enter the network or alternatively is dropped.

9. (new): The apparatus of claim 8, wherein the plurality of rules are presorted according to each value for said characteristic.

10. (new): The apparatus of claim 8, wherein said characteristic is at least one of a source address of the packet and a destination address of the packet.

11. (new): The apparatus of claim 10, wherein said characteristic is a combination of said source address of the packet and said destination address of the packet.

12. (new): The apparatus of claim 10, wherein a user is associated with each value of said characteristic, such that software module further performs the operations of:

- (i) assigning at least one privilege to said user; and
- (ii) determining whether to associate each rule with said value of said characteristic according to said at least one privilege.

13. (new): The apparatus of claim 12, wherein said software module further performs the operations of: determining a user profile of associated rules according to said at least one privilege.

14. (new): The apparatus of claim 13, wherein said user profile is further associated with a group profile, such that a plurality of values for said characteristic is associated with said associated rules of said group profile.

15. (new): A computer program product comprising:
- a computer usable medium having computer readable code embodied therein for presorting a plurality of rules for filtering a packet in network, the computer program product comprising computer readable program code for performing the operations of:
- (a) selecting a characteristic for sorting the plurality of rules, said characteristic having a plurality of possible values;
 - (b) associating each rule with at least one value for said characteristic;
 - (c) at least partially analyzing information in a received packet to obtain said value for said characteristic;
 - (d) selecting at least one of the plurality of rules according to said value obtained by analyzing information in the received packet to form at least one selected rule; and
 - (e) applying said selected rule to the packet, such that the packet is permitted to enter the network or alternatively is dropped.
16. (new): The computer readable program product of claim 15, wherein the plurality of rules are presorted according each value for said characteristic.
17. (new): The computer readable program product of claim 15, wherein said characteristic is a source address of the packet.
18. (new): The computer readable program product of claim 15, wherein said characteristic is a destination address of the packet.

19. (new): The computer readable program product of claim 15, wherein said characteristic is a combination of a source address of the packet and a destination address of the packet.

20. (new): The computer readable program product of claim 15, wherein a user is associated with each value of said characteristic, such that said computer readable program code further comprising the operations of:

- (i) assigning at least one privilege to said user; and
- (ii) determining whether to associate each rule with said value of said characteristic according to said at least one privilege.